

ABSTRACT OF THE DISCLOSURE

Computation is performed by a row computation section to pixel data stored in a first memory cell in a memory unit in a specified column, and a computed result thereof is stored in a second memory cell. Subsequently, computation is performed by a column computation section for the processing data stored in a second memory cell in a memory unit in a specified row, a computed result thereof is stored in a third memory cell, and based on the computed result, filtering is performed.